

REMARKS/ARGUMENTS

This amendment is in response to the final Office Action dated June 28, 2005. Claims 1, 4 and 20 have been amended. No new matter has been added by these amendments. Support for these amendments may be found, by way of example only, in paragraphs 0089-0105 of the instant application. Therefore, claims 1-38 are again presented for the Examiner's consideration in view of the following remarks.

Reexamination and reconsideration of the above-identified application, pursuant to and consistent with 37 C.F.R. § 1.116, and in light of the amendments and remarks that follow, are respectfully requested. Because the present claims are believed to be in condition for allowance over the cited art, good cause exists for the entry of this amendment in accordance with 37 C.F.R. § 1.116.

Claims 1-3, 6-8, 10-13, 16-20, 23-28 and 30 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,487,146 ("*Guttag*"). Claims 4-5, 21-22 and 35-38 were rejected under 35 U.S.C. § 103(a) as being obvious over *Guttag* in view of U.S. patent No. 5,581,777 ("*Kim*"). Applicants respectfully traverse these rejections, which will be addressed together.

As discussed in the reply to the previous Office Action, *Guttag* is generally directed to controlling the addresses of memory access, for example in a multiprocessor system. The system includes multiple digital image/graphics processors 71-74, which are controlled by a master processor 60, and a transfer controller 80 for mediating access to system memory. (See FIG. 2; see also col. 10, ll. 6-20.) The system also includes an additional memory 9, as well as random access memories 10 and 20.

Independent claims 1 and 20 have been amended to recite "wherein said main memory includes status information indicating whether the data associated with said programs currently are being processed by said first processing units."

In the Office Action, the Examiner stated with respect to claims 4 and 5 that "*Guttag* does not specifically disclose storing status information indicating the validity of the data stored..." (Office Action, pg. 9, numbered paragraph 35.) *Kim* was introduced to overcome this deficiency.

As discussed in the previous reply, *Kim* is directed to transferring data within a parallel processor system. The processor system includes processor clusters 40 having multiple "substantially identical processor elements 50.00-50.15, which include respective processors 49.00-49.15 connected to respective stage registers 52.00 through 52.15 by respective bidirectional local data buses. Stage registers 52.00-[5]2.15 are connected to cluster memory 54 by common data bus 53." (Col. 5, ll. 33-39; see also Fig. 2.) An array control unit (ACU) 20 includes a transfer controller 62 and a processor controller 56 connected to the stage registers 52 and the cluster memory 54 for each processor cluster 40. (See FIG. 2.)

While *Kim* includes check bits, i.e., "an error detected bit and an uncorrectable error bit" (col. 9, ll. 32-33), *Kim* does not teach or suggest status information indicating whether the data associated with said programs currently are being processed by said first processing units, as required by the independent claims.

Thus, for at least this reason, neither *Guttag* nor *Kim*, either alone or in combination, teaches or suggests all of the limitations of the independent claims. Claims 2-8, 10-13, 16-19, 21-28, 30 and 35-38 depend from independent claims 1 and 20, respectively, and contain all the limitations thereof as well as other limitations that are neither disclosed nor

suggested by *Guttag*. Applicants respectfully request, therefore, that the rejections based on *Guttag*, and on *Guttag* in view of *Kim* be withdrawn.

Claims 14 and 31-34 were rejected under 35 U.S.C. § 103(a) as being obvious over *Guttag* in view of U.S. Patent No. 6,467,012 ("*Alvarez*"). Claim 15 was rejected under 35 U.S.C. § 103(a) as being obvious over *Guttag* in view of U.S. Patent No. 5,940,870 ("*Chi*"). Claims 9 and 29 were rejected under 35 U.S.C. § 103(a) as being obvious over *Guttag* in view of U.S. Patent No. 5,497,465 ("*Chin*"). Applicants respectfully traverse each of these rejections.

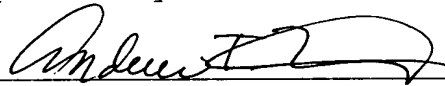
Claims 9, 14, 15, 29 and 31-34 depend from independent claims 1 and 20, respectively, and contain all the limitations thereof as well as other limitations. As stated above, *Guttag* and *Kim*, either alone or in combination, do not teach or suggest the subject matter of independent claims 1 and 20. The other references identified above do not overcome the deficiencies of *Guttag*. Applicants respectfully request, therefore, that these rejections be withdrawn.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue.

If, however, for any reason the Examiner does not believe that such action can be taken at this time, it is respectfully requested that he telephone applicants' attorney at (908) 654-5000 in order to overcome any additional objections which he might have. If there are any additional charges in connection with this requested amendment, the Examiner is authorized to charge Deposit Account No. 12-1095 therefor.

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Respectfully submitted,

By 

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